

Uki Dele & Jane Hancock

Navigating the Complexities of Three Waters Management: Insights from Wellington Water's Framework



water
NEW ZEALAND
CONFERENCE & EXPO
17-19 OCTOBER 2023
Tākina, Te Whanganui-a-Tara Wellington

Wellington Water

- The Wellington region's three water services provider
- 100% council owned and funded
- Water and wastewater management is more defined
- Stormwater management is more complex

Absolutely Positively
Wellington City Council
Me Heke Ki Pōneke

HUTT CITY
TE AWA KAIRANGI

poriruacity

 Te Kaunihera o
Te Awa Kairangi ki Uta
Upper Hutt City Council



**SOUTH WAIRARAPA
DISTRICT COUNCIL**
Kia Reretahi Tātau

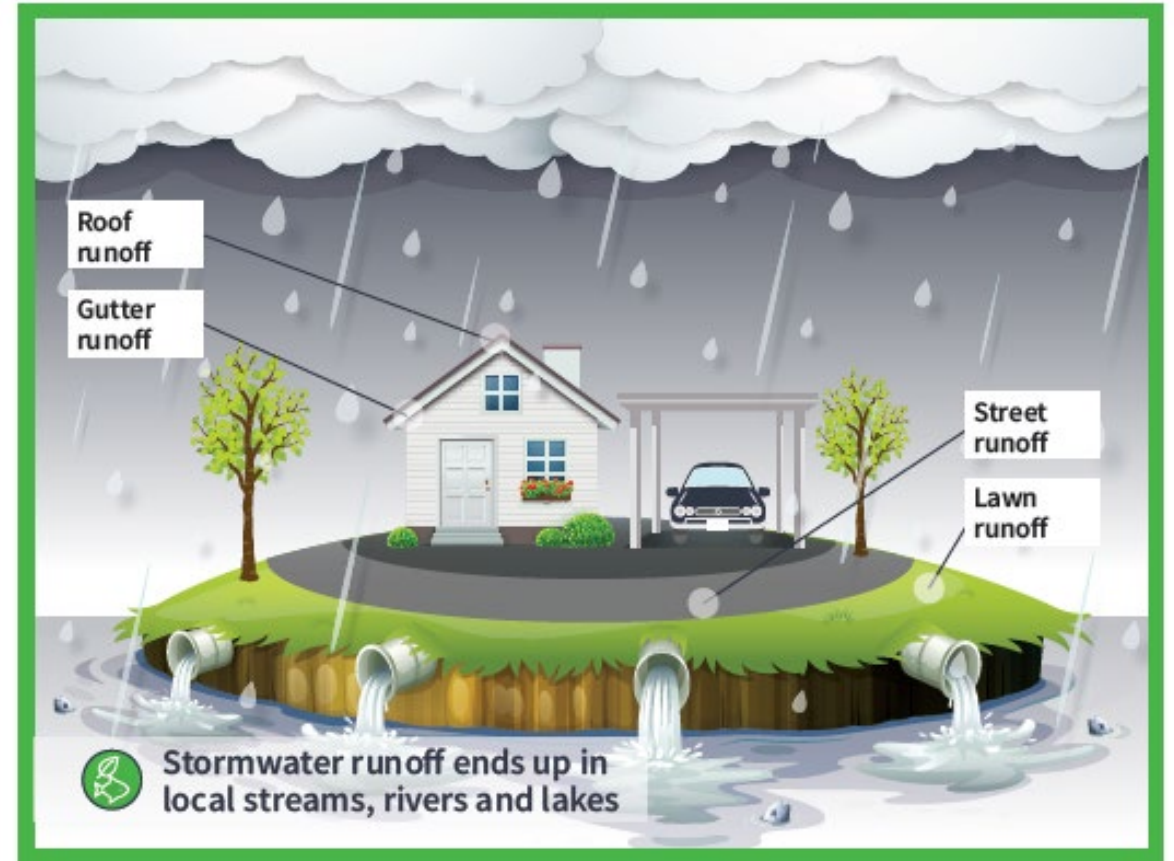
 **Greater
Wellington**
Te Pane Matua Taiao

water
NEW ZEALAND
The New Zealand Water & Wastes Association Waiora Aotearoa

water
NEW ZEALAND
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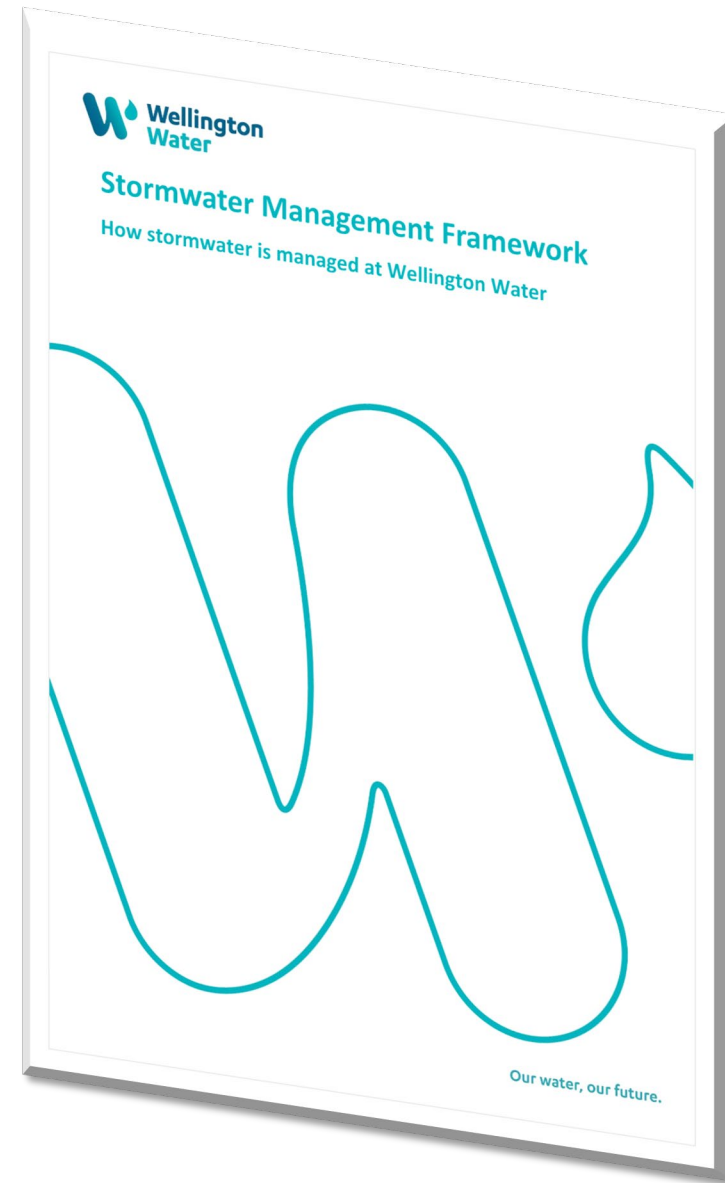
Understanding Stormwater

- Stormwater is rainwater runoff from hard surfaces.
- A byproduct of development
- Improper management can lead to damage and death
- Management responsibilities are spread among different parties

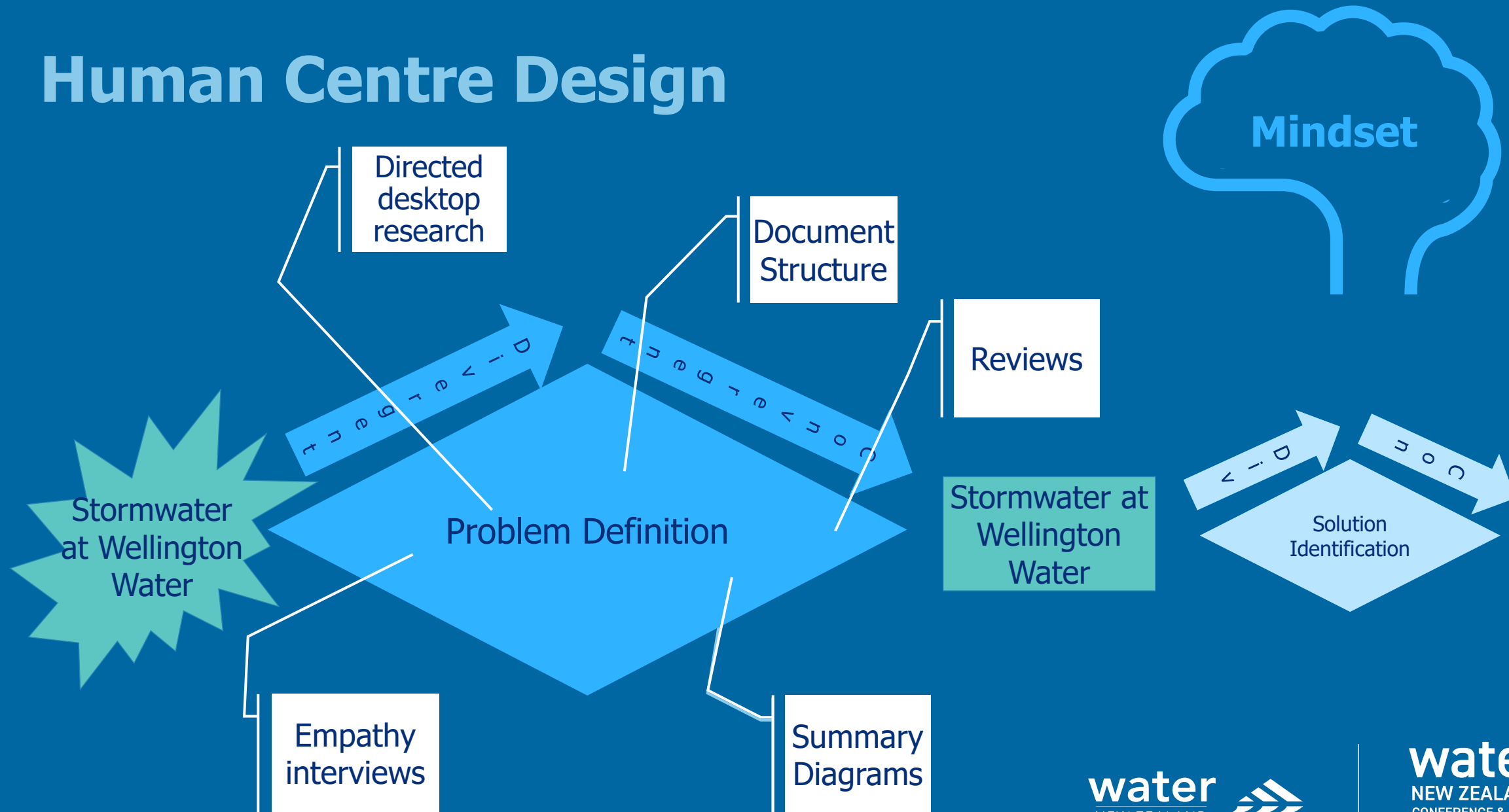


Purpose of Framework

- To document stormwater management services
- To identify gaps
- To facilitate transition

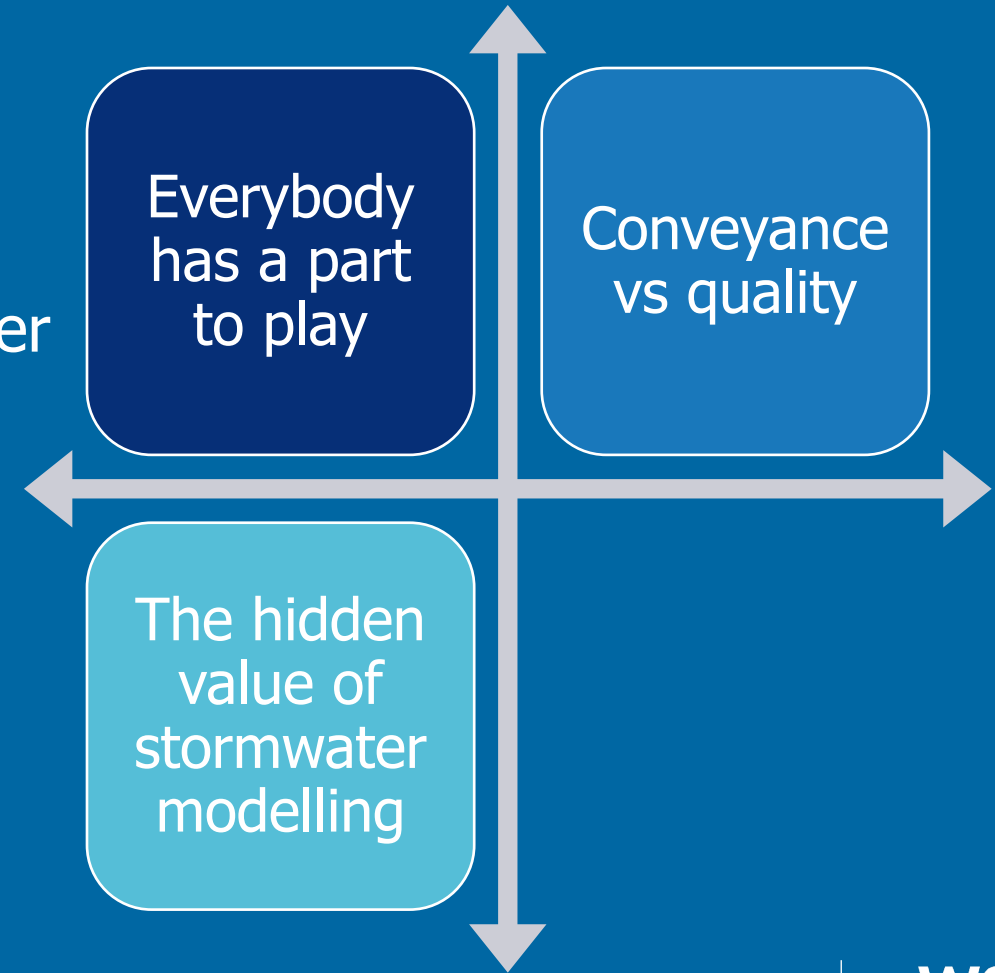


Human Centre Design



Lessons Learned

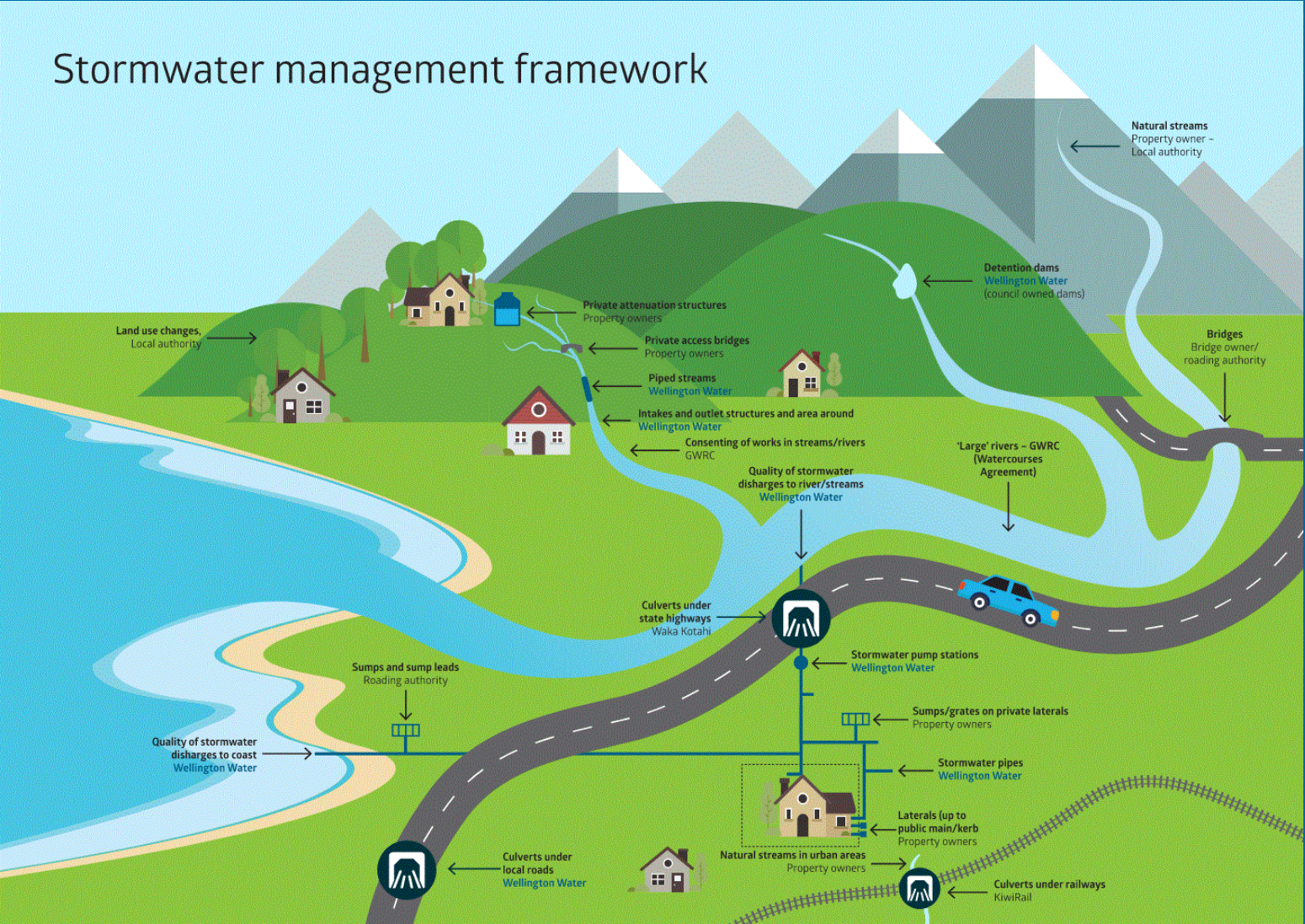
- Multiple parties are involved
- An emphasis on conveyance
- Conflict between growth and stormwater management
- Hidden value in stormwater modelling
- National standards need a local lens
- Don't forget emergency management



Everyone has a part to play

No single organization responsible

Collaboration needed



Out of sight, out of mind



Capture and convey
What about quality?
Working with nature

The hidden value of stormwater modelling

Rainfall flood risks in Wellington City

We want to manage the risk from flooding in Wellington. This application aims to explain the process the council has undertaken to understand flood risk in Well

Introduction

10 and 100 Year Depth Comparison

Flood Mapping Process

Hazard Classification Map

FAQs

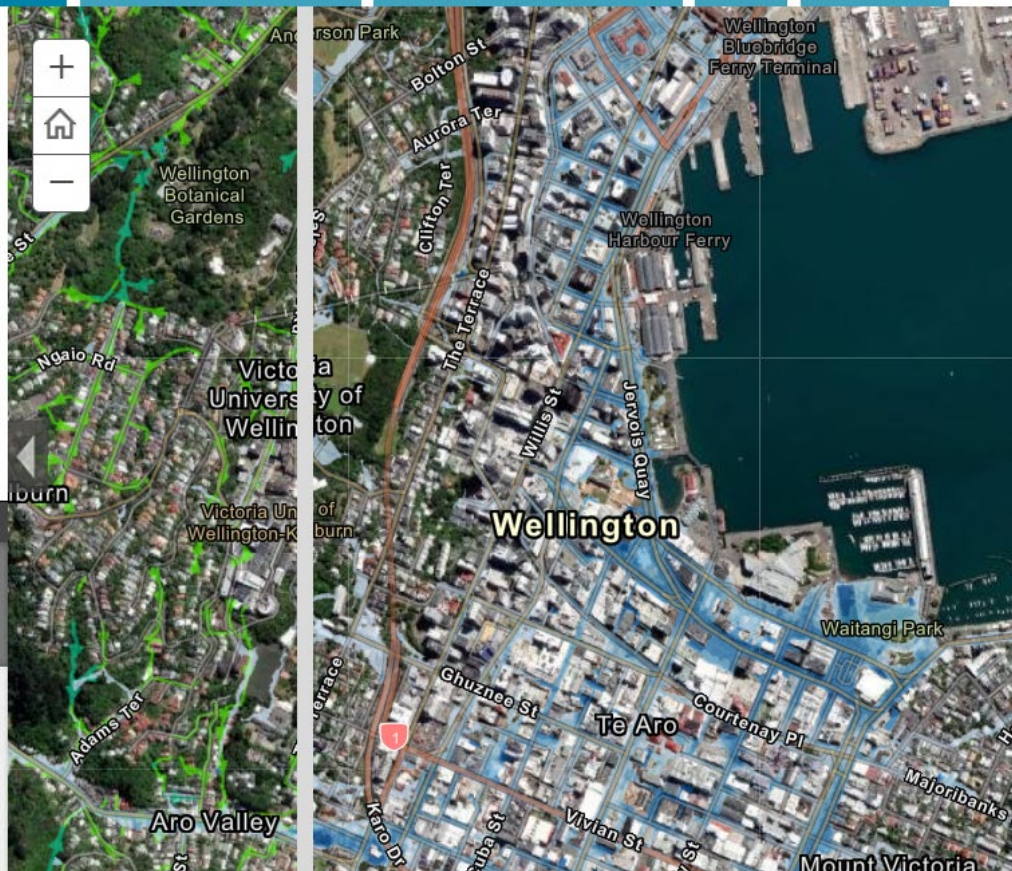
Disclaimer

Use this map to compare between the modelled flood depths for a 1 in 10 year event (left panel) and a 1 in 100 year event (right panel).

To swipe between maps, click and drag the grey vertical line across the map to compare the different flood depths.

Legend

Area not yet Modelled	Depth
	
Stormwater Assets	0.01 - 0.05m
Stormwater	0.05 - 0.10m
Stormwater Pumpstation	0.10 - 0.25m



District plan hazard maps

Emergency management

Future scenarios

Growth

Climate change

Insights Overview

- Everybody is responsible
- Collaboration is vital
- Adaptability is important
- Recognize local wisdom
- Elevate level of service
- Respond to climate Change
- Empower Communities
- Use Certificates



Empower Communities

Collective responsibility

Engaging communities to help

Programs like Adopt-a- Drain, effective overseas and south Island

Connects people with the network and waterways

Helps keep waterways clean and reduce flooding



We protect our water

Sweep up! Rake up! Pick up!

Elevate Service

Consistent level of service

Unifying strategy to address legacy issues

Clawback engineering and reinstate flowpaths

“Even small investments can have a big impact when strategically implemented” Sponge cities, WSP/Helen Clark foundation



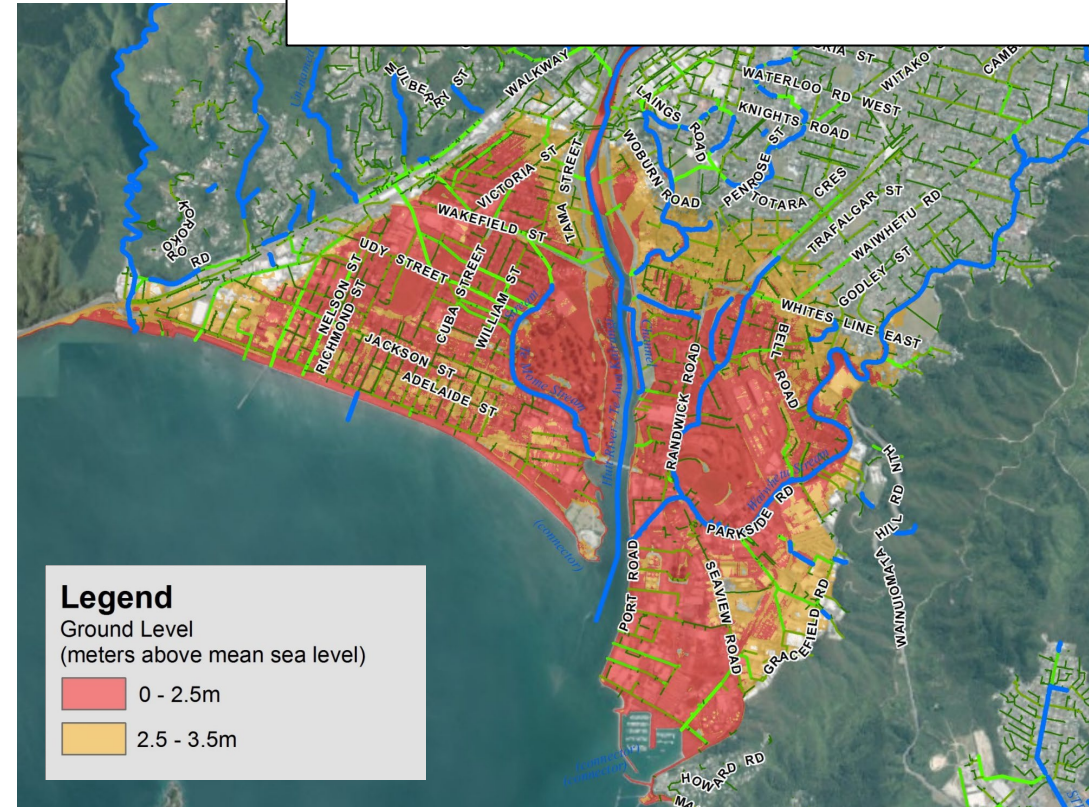
Climate Response

Climate change exacerbates existing stormwater challenges.

Long term impacts of flooding on communities

Calls for courageous conversations to address these challenges

Insurance companies are withdrawing from flood risk areas



Certification

Varying consent processes and timelines complicate stormwater management for new developments.

Evolving catchment specific water quality requirements

Certification programs, like Timaru District Council's, streamline and address global consent requirements.

Enhances collaboration, and adherence to evolving standards

TIMARU DISTRICT COUNCIL
Te Kaitiaki o Te Taioi Matiri

Application No: 420 • 20 • •

Application for Stormwater Discharge

(to obtain certification of quantity and quality of stormwater discharge to the Public Stormwater Network)

Application does not constitute Approval

- All stormwater discharge to the Council's stormwater network must comply with Chapter 15, Part 4 (Water Services, Stormwater) of the Timaru District Council By-Law. A copy of this Bylaw can be found on Council's website: www.timaru.govt.nz/bylaw/chapter-15
- Upon Acceptance of this application, certification will be provided to the applicant of approval of stormwater management.
- An Application for Services Consent Form is then required to be lodged and approved prior to discharge being made from any premise to Timaru District Council's Stormwater system.
- Incomplete **Application for Stormwater Discharge** will not be processed.
- For clarification or questions concerning this form, please contact the Timaru District Council on: (03) 687-7200.

SECTION 1 – CONTACT DETAILS

1.1 Owner of site from which stormwater will be discharged:

Business Trading Name: _____
Company or Registered Business Owners(s) Full Name: _____
Address for Service: _____
Email: _____
Daytime phone: _____ Mobile: _____
After Hours phone: _____

1.2 Contact information of person responsible for Stormwater management at this site (if different from 1.1)

Name: _____
Position: _____
Address for Service: _____
Email: _____
Daytime phone: _____ Mobile: _____
After Hours phone: _____

1.3 Contact information of occupier/operator of site from which stormwater will be discharged. (if different from above)

Business Trading Name: _____
Company Name or Registered Business Owner(s) Full Names(s): _____
Company's Registered Address: _____
Address for Correspondence: _____
Email: _____
Daytime phone: _____ Mobile: _____
After Hours phone: _____

SECTION 2 – DETAILS OF PROPERTY DISCHARGING STORMWATER

Street Address: _____
Town: _____
Valuation No.: _____
Legal Description: _____

Is this Application associated with a: _____ (Proposed Lot)

Services Consent?	Yes / No	If yes, advise Services Consent No.	60 • 20 • •
Building Consent?	Yes / No	If yes, advise Building Consent No.	2 • 20 • •
Subdivision / Land Use Consent?	Yes / No	If yes, advise Resource Consent No.	101 or 102 • 20 • •

Doc # 1420549 v.2 – Sep 2022
Completed Applications can be emailed to: infrastructureconsent@timdc.govt.nz
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Conclusion

A pivotal step in Wellington Water's management

Highlights collective responsibility and importance of climate response

People focused Human-Centered Design approach

Next step to expand people involved



Acknowledgements

We would like to acknowledge all employees of Wellington Water who were interviewed or contributed to the development of the Stormwater Management Framework and this paper

